

CLAIMS

What is claimed is:

1. A silver-colored, tarnish-resistant, corrosion-resistant alloy consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 29.75% \pm 5% by weight zinc;
approximately 62.15% \pm 5% by weight copper;
approximately 1.35% +5%; -0.85% by weight silicon; and
approximately 6.75% +1.25%, -6.75% by weight tin.
2. A silver-colored, tarnish-resistant, corrosion-resistant alloy consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 24.0% \pm 5% by weight zinc;
approximately 74.8% \pm 5% by weight copper; and
approximately 1.2% \pm 5% by weight silicon.
3. A silver-colored, tarnish-resistant, corrosion-resistant alloy consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 32.60% \pm 5% by weight zinc;
approximately 64.70% \pm 5% by weight copper;
approximately 0.60% \pm 5% by weight silicon;
approximately 0.90% \pm 5% by weight tin; and
approximately 1.20% \pm 5% by weight indium.
4. A silver-colored, tarnish-resistant, corrosion-resistant alloy consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 29.75% by weight zinc;
approximately 62.15% by weight copper;
approximately 1.35% by weight silicon; and
approximately 6.75% by weight tin.

5. A silver-colored, tarnish-resistant, corrosion-resistant jewelry consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 24.0% by weight zinc;
approximately 74.8% by weight copper; and
approximately 1.2% by weight silicon.
6. A silver-colored, tarnish-resistant, corrosion-resistant jewelry consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
approximately 32.6% by weight zinc;
approximately 64.7% by weight copper;
approximately 0.6% by weight silicon;
approximately 0.9% by weight tin, and
approximately 1.2% by weight indium.
7. A silver-colored, tarnish-resistant, corrosion-resistant jewelry consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
29.75 % by weight zinc;
62.15% by weight copper;
1.35% by weight silicon; and
6.75% by weight tin.
8. A silver-colored, tarnish-resistant, corrosion-resistant jewelry consisting essentially of:
92.5 to 95% by weight silver, the balance of which is an alloy comprised of:
32.60 % by weight zinc;
64.70% by weight copper;
0.60% by weight silicon;
0.90% by weight tin; and
1.20% by weight indium.

9. A tarnish-resistance, corrosion-resistance-improving alloy consisting essentially of:
 - 24.0% by weight zinc;
 - 74.8% by weight copper; and
 - 1.2% by weight silicon.
10. A tarnish-resistance, corrosion-resistance-improving alloy consisting essentially of:
 - 29.75% by weight zinc;
 - 62.15% by weight copper;
 - 1.35% by weight silicon; and
 - 6.75% by weight tin.
11. A tarnish-resistance, corrosion-resistance-improving alloy consisting essentially of:
 - 32.60% by weight zinc;
 - 64.70% by weight copper;
 - 0.60% by weight silicon;
 - 0.90% by weight tin; and
 - 1.20% by weight indium.
12. A tarnish-resistance, corrosion-resistance-improving alloy consisting essentially of:
 - 24.0% by weight zinc;
 - 74.8% by weight copper;
 - 1.2% by weight silicon;
 - 0.0% tin; and
 - 0.0 % indium.
13. A tarnish-resistance, corrosion-resistance-improving alloy consisting essentially of:
 - 29.75% by weight zinc;
 - 62.15% by weight copper;
 - 1.35% by weight silicon;
 - 6.75% by weight tin; and
 - 0.0% indium.

14. A method of making a tarnish-resistant, corrosion-resistant silver-colored alloy comprised of the steps of:

- depositing a first amount of silver in a crucible;
- adding a second amount of Sterilite alloy to the crucible;
- heating the silver and Sterilite in the crucible;
- mixing the silver and Sterilite between the temperatures of approximately 875°C (1605°F) and 1010°C (1850°F);
- holding the temperature of the mixed silver and Sterilite at a temperature of 1010°C (1850°F) for 30 seconds;
- cooling the mixture to approximately 850°C (1562°F);
- re-heating the mixture to approximately 980°C (1796°F); and
- pouring the molten mixture into a mold.

15. The method of claim 12 further comprised of the step of adding a flux to the Sterilite prior to heating in the crucible.

16. The method of claim 12 wherein the step of adding a flux is comprised of adding a small amount of Borax and Boric Acid to the Sterilite alloy.